BY ORDER OF THE COMMANDER
AIR FORCE MATERIEL COMMAND

AIR FORCE INSTRUCTION 21-123

AIR FORCE MATERIEL COMMAND
Supplement 1

7 OCTOBER 1998

Maintenance

AIR FORCE GOLD PROGRAM

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This supplement expands on the guidance contained in AFI 21-123. This program will decrease the cost of test wing maintenance by increasing wing-level repair capability of aerospace parts and equipment. This instruction applies to all Air Force Materiel Command (AFMC) operational maintenance organizations. Recommendation for improving this supplement may be sent through command channels to HQ AFMC/LGM/DOM, 4375 Chidlaw Rd, Suite 6, WPAFB OH 45433-5006. Waiver authority for this supplement is HQ AFMC/LGM/DOM. This supplement does not apply to Air Force Reserve or Air National Guard units or members.

SUMMARY OF REVISIONS

This ismthe original version of this supplement and must be completely reviewed.

AFI 21-123, 1 February 1997, is supplemented as follows:

1. (Added) This supplement names Gold Savings Through Asset Repair Teams (GoldSTART) as theAFMC program and identifies specific responsibilities, establishes costs-savings, funds tracking requirements and reporting procedures. It also implements a certification/recertification program for circuit card repair (CCR) technicians.

1.1. (Added) The primary purpose of the GoldSTART program is to keep local aircraft flying when the supply system is unable to deliver required parts.

1.2. (Added) Another purpose of the GoldSTART program is to fill Air Force aircraft requirements on a case-by-case basis, with proper coordination with local supply personnel, the materiel manager (MM) and the equipment specialist (ES).

1.3. (Added) The GoldSTART program provides an opportunity to find certified, innovative, smart repairs. It will also reduce operations and maintenance costs by making economical repairs to items which were previously discarded or sent off station for repair.

3.1. GoldSTART is a wing level program to encourage innovation, ingenuity and resourcefulness. The GoldSTART process is established to implement unit level repairs of consumable items and to change the source, maintenance, and recoverability code from depot to field repair on reparable items. Existing processes are used to seek approval for unit level repairs and other innovative ideas. GoldSTART requires close coordination with AFMC ESs, MMs and weapon system program directors (SPD). Units are not authorized to deviate from established technical data. All unit procedures will adhere to Air Force instructions and policy.

3.1.1. (Added) The unit GoldSTART manager will report to the logistics group commander and will be an officer, senior NCO or civilian equivalent having a strong maintenance background. The manpower for this section is reflected on the UMD as five positions of which two may be used to perform CCR. CCR may be aligned with the Avionics Flight, however savings and cost avoidance will be reported through the GoldSTART manager. In addition, one management position will be filled by an Inventory Management Specialist/Craftsman, AFSC 2S0X1. The local chief of supply will appoint a GoldSTART focal point within the supply complex to coordinate on all GoldSTART initiatives. The GoldSTART manager is the central focal point for all GoldSTART initiatives through the GoldSTART process. GoldSTART duties will not duplicate those of the product improvement manager or alter the product improvement program. Responsibilities of the GoldSTART manager include:

3.1.1.1. (Added) Determine if an idea is a GoldSTART initiative. If not, the GoldSTART manager provides an explanation back to the submitter.

3.1.1.2. (Added) Establish a manual or automated system to track repair initiatives that are being developed or evaluated (attachment 2).

3.1.1.3. (Added) Assign a GoldSTART control number and ensure a GoldSTART tracking folder is initiated for each part processed through the GoldSTART office. The tracking folder should be identified by the national stock number and nomenclature of the part and contain information such as part number, brief description of problem/or status of part, source of repair, evaluation data sheet, memos for record, points of contact, cost data and other pertinent information relating to the initiative. The following will be kept in the tracking folder: copies of forms submitted such as AFTO Form 22, **Technical Order Improvement Report and Reply**, and AFTO Form 135, **Source Maintenance, and Recoverability Code Change Report**, AF Form 86, **Request for Cataloging Data/Action**, AF Form 1000, **IDEA Application** and AFMC 252, **T.O. Publication Change Request**.

3.1.1.4. (Added) Locate who can best evaluate the idea and assign action for a response.

3.1.1.5. (Added) Track status of GoldSTART initiatives through completion.

3.1.1.6. (Added) Assist evaluators by interfacing with AFMC MMs, ESs, engineers, base contracting, base supply, product improvement manager, and other agencies.

3.1.1.7. (Added) Wing focal point for Repair Initiative Conferences (RIC).

3.1.1.8. (Added) Wing focal point for CCR initiatives.

3.1.1.9. (Added) Report cost avoidance/cost-savings data in January and July to HQ AFMC/LGMA.

3.1.1.10. (Added) Interface between other Gold Program managers.

3.1.1.11. (Added) Establish both supply and funds accounts for GoldSTART items (i.e., for purchase of repair parts, bits and pieces, turn-in of repaired assets, and due in-from maintenance (DIFM) audit trail).

3.1.1.12. (Added) Establish procedures to ensure proposals are not implemented until formal repair authorization is received. MM and ES offices may authorize repair in writing (e-mail, facsimile, memo, etc.) pending processing of applicable forms.

3.1.1.13. (Added) Ensure the subsequent repair of assets does not create an excess condition within the Standard Base Supply System (SBSS).

3.1.1.14. (Added) Ensure all evaluations with possible safety/safety of flight impact are processed through quality assurance (QA).

3.1.1.15. (Added) Ensure wing personnel are familiar with the GoldSTART program.

3.1.1.16. (Added) Monitor and track status of all items sent to off-base sources for repair.

3.2. Submit all AFTO Forms 135 through the GoldSTART office. The Product Improvement office will incorporate them into their AFTO Form 135 tracking system. Upon approval, it is highly recommended that the initiator submit an "AFTER-THE-FACT" AF Form 1000 IAW AFI 38-401, The Air Force Innovative Development Employee Awareness (IDEA) Program.

3.2.1. (Added) The MM/ES must be contacted to determine if an item requires special consideration, (i.e., safety of flight, warranty, unique supply requirements or restrictions). Depot level technical orders (TO) may be used to develop repair procedures during the evaluation process.

3.2.2. (Added) Budget code "8" items with a credit flag of "D" are not cost-effective repair candidates and should only be considered on a case-by-case basis if the transaction history shows a recurring demand level and/or mission requirements dictate. Budget code "9" items should be evaluated independent of the credit flag indicator IAW AFMAN 23-110, Vol II, *USAF Supply Manual*, Chapter 13, Table 13A4.1.

3.2.3. (Added) Responsibilities of the GoldSTART assigned evaluator (or evaluation team) include:

3.2.3.1. (Added) Determine if local needs exist.

3.2.3.2. (Added) Determine if Air Force needs exist.

3.2.3.3. (Added) Coordinate prospective initiative with the GoldSTART focal point in the supply complex.

3.2.3.4. (Added) Determine if local repair is possible.

3.2.3.5. (Added) Assist shops in obtaining required technical data, equipment and/or parts to support the evaluation process.

3.2.3.6. (Added) Determine if Air Force repair is possible.

3.2.3.7. (Added) Seek off-base sources if no Air Force capability exists (other DoD agencies/civilian contractors).

3.2.3.8. (Added) Obtain data from contractor to process AF Form 9, **Request for Purchase**.

3.2.3.9. (Added) Inquire about depot repair versus buy program, technology insertion, or other initiatives.

3.2.3.10. (Added) Provide GoldSTART managers with information concerning supply/mission requirements status of the item.

3.2.3.11. (Added) Use GoldSTART generated dollars to fund GoldSTART initiatives.

3.2.3.12. (Added) Use established supply procedures for DIFM control.

3.2.3.13. (Added) Coordinate repair initiative decision with GoldSTART manager.

3.2.3.14. (Added) Identify part(s), national stock number, part number, MM, ES, application, FEDLOG run and SBSS printout.

NOTE: Turn-ins for items which fall under the General Support Division (GSD), budget codes "9" are granted credit based on several factors such as requisitioning objective, due in quantity and quantity on-hand. Credit indicators are not considered in this process. Coordination with local base supply Gold-START focal point must be made prior to start of repair initiative to determine if item to be repaired has sufficient demand data to ensure credit turn-in after repair initiative has been completed. Once base supply has coordinated on a GoldSTART initiative, maintenance will be reimbursed for their efforts, if successful, regardless of the demand data at the time of turn in. Coordination should be made with using organizations to determine if future demands will be placed against the supply system when recurring demand data does not support automatic credit. This effort will ensure the GSD Stock Fund does not suffer losses based on credit granted without a corresponding sale. This rationale should also be used when forced credit is desired through the local base supply Stock Fund Management Section. (Reference AFMAN 23-110, Vol II, Chapter 13, Table 13A4.1.)

3.2.4. (Added) The repair facility is any wing/base activity capable of providing maintenance support for Gold Program initiatives. Responsibilities of the repair facility include, but are not limited to:

3.2.4.1. (Added) Evaluate repair capability in relation to available technical data, tools, test equipment, training and/or parts required for repair of the item.

3.2.4.2. (Added) Obtain necessary resources to properly evaluate an item.

3.2.4.3. (Added) Notify GoldSTART evaluator(s) of any deficiencies which limit evaluation.

3.2.4.4. (Added) Return items and all applicable documentation to GoldSTART evaluator(s) upon completion of the process, including repair procedures and costs analysis (work hours and parts).

3.2.4.5. (Added) Provide assessment if an item cannot be repaired.

3.2.5. (Added) The GoldSTART manager, ensuring accurate tracking and accountability monitors all parts in the GoldSTART evaluation process (attachment 1). All XF3 and approved XD2 assets must be maintained on DIFM details during the repair process. To ensure MMs maintain worldwide visibility of serviceable assets, all repaired DIFM items must be returned to supply at the earliest possible date.

3.3.1. (Added) After thorough evaluation by the evaluator or evaluation team, the GoldSTART manager ensures a comprehensive package is submitted to the proper approval authority for all worthwhile ideas. Single manager (SM)/ES approval is needed for all initiatives. The Air Logistics Center responsible for the end item or component is the final approval authority for AFTO Forms 135. Use existing guidance and local GoldSTART procedures for routing AFTO Form 135 (per TO 00-25-195), AFTO Form 22 *(*per TO 00-5-1) and AF Form 1000. Add the following statement to the forms: "**THIS IS A GoldSTART INITIATIVE."** All research should be documented in sufficient detail to communicate the idea to the approval authority. A copy of the submittal will be filed in the candidate tracking folder for that repair initiative.

3.3.2. (Added) Reevaluate/Resubmit. If a GoldSTART initiative is disapproved and rebuttal is deemed necessary, use rebuttal procedures for the AFTO Form 135 or AF Form 1000, as appropriate. The RIC is available to have procedures reevaluated by the Air Logistics Center representatives. The SPD has final disapproval authority.

3.4.1. (Added) Deficiency reporting shall be in accordance with TO 00-35D-54.

3.5. (Added) Program Benefits Tracking/GoldSTART Auditing Procedures. Compute savings and repair costs using guidance outlined in TO 00-20-3. Cost benefit/savings must be computed using total costs to Air Force. Include wing/base, supply system, depot, and any other costs to determine total cost of repair.

3.5.1. (Added) Work hours used to repair assets for GoldSTART must be tracked. Wing manpower office personnel can provide assistance in calculating work hour cost.

3.5.2. (Added) The part and work hour cost is deducted prior to determining GoldSTART savings. All depot exchange costs and contractor repair costs are deducted prior to determining GoldSTART savings. The item price used to determine GoldSTART savings is the replacement cost.

3.5.3. (Added) All GoldSTART requirements and needs, i.e., office equipment, computers, and temporary duty assignments (TDY) should be funded through the use of GoldSTART savings.

3.5.4. (Added) GoldSTART savings are returned to the test wing for utilization as determined by the logistics group commander.

5.2.1. (Added) RICs are very productive because the using command technicians have the opportunity to conduct direct customer dialog with depot engineers and technicians, expand repair capability, investigate new techniques and resolve problems. RICs provide periodic senior level interface between units, system functional managers, and SPDs. The RICs provide a forum where the repair proposal initiators and depot approval authorities meet and review previously unresolved and disapproved requests with the objective of resolving any communication problems. A flying wing usually hosts RICs. The weapon system functional manager administers the meeting while AFMC is represented by the SPD for that weapon system. Other attendees include representatives from each operational wing using that MDS (including other MAJCOMs) and the appropriate AFMC specialists and engineers to address agenda items (proposals) as identified by the SPD. Wing Air Force Engineering and Technical Services (AFETS) specialists can offer invaluable technical advice on proposal preparation and representation. Unit representatives should be prepared to brief their proposals, perform demonstrations, and/or provide videotapes. Videotapes are highly recommended and contribute to RIC success. Funding for travel is the responsibility of the attending activities.

5.3.1. (Added) Wing representatives are responsible for briefing their proposals. Limit briefings and demonstrations on agenda items to five minutes.

5.3.2. (Added) Proposals should have firm justification to be considered as candidates for the RIC agenda. Action items are prioritized as critical (those causing excessive not mission capable (MICAP) conditions identified in the weapon system management information system (WSMIS), aborts, etc.) or routine to enable the SPD to direct limited assets (funding or manpower) to the highest priority problems. The total number of RIC items to be worked (including those from previous conferences) is negotiated between the SPD and the MAJCOM weapon system functional manager. AFMC centers will research items selected for the RIC action before the start of the RICs. Proposals must include as much detail as possible. Include any previously completed forms along with information needed for the RIC message. The MAJCOM functional manager through HQ AFMC/LGMA, should submit all RIC agenda items for depot evaluation. Only originators or the system functional managers may delete an eligible agenda item.

5.3.3. (Added) Units will identify agenda items that meet the criteria for "Priority Submission" as contained in governing TOs.

6. The GoldSTART manager is responsible for this operation and ensures the CCR program meets the Air Force Gold Program requirements. CCR personnel will report directly to the GoldSTART manager on all issues pertaining to CCR policies and guidance. The GoldSTART manager will ensure minimum required circuit card analysis and repair tools are available, confirms technicians are certified, acts as base/wing central point of contact for silver and gold disk development packages, and ensures end item test capability exists before repairs are performed. If aligned with the Avionics Flight, the GoldSTART manager will work with the Avionics Flight management for compliance with this instruction.
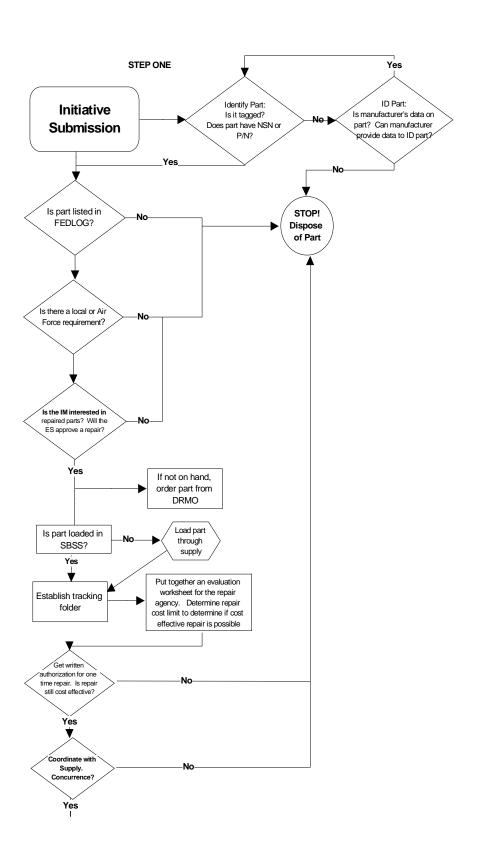
6.1. Units will forward proof of these requirements and all applicable CCR information and requests to the lead CCR base for their MDS.

6.1.1. (Added) Special Training/Equipment. Standardization of equipment and training is essential for consistent, quality repairs and is a key consideration in the approval process. Before requesting a repair code change through an AFTO Form 135, the unit must have qualified technicians who can perform the requested repair. In addition, repairs must be standardized throughout the command (i.e., repair techniques must be consistent from unit-to-unit and technician-to-technician for like items). Repairs currently authorized by applicable weapon system TOs do not normally require specialized training. To perform complex CCR, training must be acquired from either the USAF Field Training Detachment (FTD) 512, Davis-Monthan AFB AZ (USAF Certification is for 18-months), or the US Navy (US Navy Certification is for 12-months).

6.1.2. (Added) Standardization is also a key factor to consider when researching the equipment for Gold-START repairs. Special training may be required to operate and maintain unique test equipment. Obtaining and using this equipment may present unique supportability needs for units to include training, spares support, calibration and other logistic requirements. Before acquiring special equipment, units should perform a cost analysis to determine the feasibility of purchasing high cost items. Units should acquire special equipment only if it is cost-effective and any supportability issues are resolved. Wing manpower offices and HQ AFMC/XPM can provide assistance or information concerning the use of productivity enhancing capital investment (PECI) funds to purchase this equipment.

6.1.3. (Added) Technicians certified on the minimum requirements for CCR are authorized to repair single and double-sided circuit card assemblies (CCA) and other electronic assemblies, up to and including the removal and installation of multilead integrated circuits. Authorized repairs include surface repair of CCA laminate and printed circuit wiring, removal and application of conformal coatings and installation of wires to terminals.

6.1.4. (Added) Document CCR certification, decertification and recertification on the AF Form 623, **Individual Training Record**. In addition to FTD or Navy certification requirements, locally developed AF Forms 797, **Job Qualification Standard Continuation/Command JQS,** may identify additional tasks for specialized equipment, training or locally developed authorized repair procedures.

6.1.5. (Added) Certification is valid until the last day of the last month in which the certification expires. Certified technicians are responsible for tracking and maintaining currency of their certification. Exceeding certification period or loss of technical competency/skill is cause for automatic decertification. Recertification time criteria are based on the certification provider. If a technician fails to recertify, they are required to attend the initial certification course.

7.3. Lead Wing. Lead CCR bases are also silver disk developers.

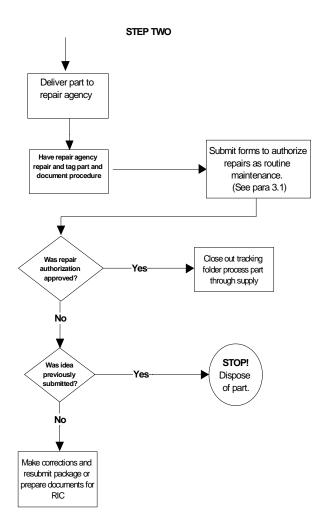7.7. Gold Program elements/agencies are also considered SMs.

7.7.4. (Added) Materiel Manager (MM). The individual responsible for procurement of USAF assets.

7.7.5. (Added) Equipment Specialist (ES). The individual responsible for asset configuration/standardization/ upgrade.

7.7.6. (Added) AFMC Single Manager (SM). The command representative for assets.

7.7.7. (Added) Evaluator. The person or agency that is considered competent authority for evaluation purposes to inspect part candidates for the repair initiative program (RIP).

7.7.8. (Added) Contractor. A non-USAF agency that has repair capability/authority to fix candidates of RIP.

7.7.9. (Added) Engineer. Personnel qualified to give engineering technical support.

7.7.10. (Added) Technician. First level personnel questioning parts candidacy for RIP.

7.7.11. (Added) Flight GoldSTART Representative. The individual responsible for RIP candidates consolidation and processing for turn-in to the GoldSTART office. The unit supply clerk usually performs this function.

7.7.12. (Added) Squadron GoldSTART Representative. The squadron point of contact for GoldSTART issues/policies.

7.7.13. (Added) Group GoldSTART Representative. See responsibilities in paragraph 3.2. Reports to the LG and is the wing point of contact for all aspects of the GoldSTART program. Squadron/flight representatives report to this office for guidance/clarification.

7.7.14. (Added) Wing GoldSTART Representative. The wing representative for inter-coordination of all GoldSTART elements and final coordinating authority of inter-group/squadron/flight memorandum of agreements (MOA).

7.7.15. (Added) Contracting Agency. The USAF office that is responsible for the processing of GoldSTART contracts for the repair of RIP candidates.

7.7.16. (Added) Supply Squadron. Responsible for the processing of all (XB, XF, XD) part turn-in, account crediting of GoldSTART funds paid by on/off base credit indicators.

7.7.17. (Added) Associate GoldSTART Managers (In AFMC). Managers that provide a single face point of contact for crosstalks and benchmarking in AFMC.

7.7.18. (Added) Associate Gold Program Managers (Not in AFMC). Managers that provide a single face point of contact for crosstalks and benchmarking in other commands such as ACC, PACAF and USAFE.

7.7.19. (Added) Product Improvement Manager (PIM) . QA representative that coordinates on repair initiatives.

7.8. (Added) GoldSTART Repair Initiative. Any initiative which meets the GoldSTART purpose.

7.9. (Added) Approval Authority. Anyone who can authorize a suggested initiative. For weapon system related proposals, the SPD is the last level of appeal for disapproved initiatives and has final approval authority.

7.10. (Added) Repair Initiative Conference (RIC). Periodic, aircraft specific, field hosted conferences offering the opportunity to improve maintenance processes, techniques, and tools.

7.11. (Added) Circuit Card Repair (CCR). Certified troubleshooting, isolation, and repair of defective circuit cards using personal computer-based diagnostic equipment.

7.12. (Added) Tracking Record. A manual or automated system to track GoldSTART repair initiatives.

7.13. (Added) Cost Savings. Any serviceable item turned into base supply in which a credit turn-in action occurs. COST SAVINGS = credit received - repair labor costs - repair parts cost - contract repair costs - overhead costs - other costs.

7.14. (Added) Cost Avoidance. Any serviceable item returned to user, eliminating the purchase of a new replacement item. COST AVOIDANCE = replacement purchase price - repair labor costs - repair parts costs -contract repair costs - overhead costs - other costs.

Attachment 1

GOLDSTART EVALUATION PROCESS

STEP ONE

Initiative Submission

Identify Part: Is it tagged? Does part have NSN or P/N?

ID Part: Is manufacturer's data on part? Can manufacturer provide data to ID part?

Yes

No

No

Yes

Is part listed in FEDLOG?

No

STOP! Dispose of Part

Is there a local or Air Force requirement?

No

Is the IM interested in repaired parts? Will the ES approve a repair?

No

Yes

If not on hand, order part from DRMO

Is part loaded in SBSS?

No

Load part through supply

Yes

Establish tracking folder

Put together an evaluation worksheet for the repair agency. Determine repair cost limit to determine if cost effective repair is possible

Get written authorization for one time repair. Is repair still cost effective?

No

Yes

Coordinate with Supply. Concurrence?

No

Yes

STEP TWO

Deliver part to
repair agency

**Have repair agency
repair and tag part and
document procedure**

Submit forms to authorize
repairs as routine
maintenance.
(See para 3.1)

**Was repair
authorization
approved?**

Yes

Close out tracking
folder process part
through supply

No

**Was idea
previously
submitted?**

Yes

STOP!
Dispose
of part.

No

Make corrections and
resubmit package or
prepare documents for
RIC

Attachment 2
GOLDSTART MANAGER TRACKING RECORD

The GoldSTART Manager will control the tracking record. File copies of submitted AFTO Forms 22, AFTO Forms 135, and AF Forms 1000, etc., will be maintained in the file. However, the record will reference these form control numbers. The record may be automated or manual, but must include the following:

GOLDSTART CONTROL NUMBER (see example format below)
AFTO FORM 22, AFTO FORM 135, and/or AF FORM 1000
NSN
PART NUMBER
ITEM NOMENCLATURE
BRIEF DESCRIPTION OF INITIATIVE
INITIATIVE INITIATOR
SOURCE OF REPAIR (ON/OFF BASE)
POINTS OF CONTACT
MEMO FOR RECORD
COSTING DATA

GOLDSTART CONTROL NUMBER FORMAT
11 TOTAL DIGITS (Bar Code Compatible)

Program/Base Name:	Fiscal Year:	Sequential Number:
GSEG or GSED	97	00001

Example: Eglin AFB	1st Control Number =	GSEG9700001
	2nd Control Number =	GSEG9700002

Example: Edwards AFB	1st Control Number =	GSED9700001
	2nd Control Number =	GSED9700002

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